SINK WITH ATTACHABLE DECORATIVE PANEL

Background of the Invention

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In designing and constructing high quality home kitchens, it is desirable to provide an attractive sink as a key component of the overall decorative effect. Many different designs of sinks and the fixtures associated with them have been developed to complement the different styles popular in kitchen designs. However in this highly competitive market, new decorative effects are always in demand particularly for highend homes.

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Most home sinks are adapted to be placed within a recess in the countertop such that the top of the sink is accessible and visible but the front face of the sink is concealed behind paneling, cabinet doors, etc. However, a variety of sink known as a farm sink has become popular. Farm sinks are characterized by a front surface of the sink itself being displayed on the vertical front face of the cabinet or counter in which it is installed instead of being hidden behind facing. Such farm sinks are generally formed of an attractive metal such as bronze or stainless steel, and the attractive metal tone that shows on the vertical front face of the counter adds to the decorative ambience of the kitchen design.

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While many farm sinks have simply a smooth metal surface on the front, some farm sinks have added decorative texturing, such as matt finishes or peening, to add to the visual interest of the surface. However, such treatments cannot be provided without providing the entire sink. Inventories of sinks having alternative surface treatments must be held, either at the manufacturer or at the point of sale, or sinks must be custom manufactured or ordered to match a desired sink (e.g. bronze) with a desired surface treatment (e.g. matt finish). This causes cost, lead-time, or both to increase.

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In addition, a wide variety of decorative treatments cannot be produced without accepting the high costs of custom manufacture. It is impossible for a manufacturer to

anticipate all of the decorative treatments that could be desired, and it is impractical to carry more than a few of the possibilities in inventory.

It is also the case, for at least some types of decorative treatments, that producing the decorative treatment is complicated by the structure of the sink and is therefore more costly than if produced on some other article.

Yet another problem with the prior art is that the farm sink is typically an expensive article and if the purchaser's taste changes so that he or she no longer likes the decorative treatment, he or she must purchase a whole new sink.

Accordingly, there is a need for a sink with an attachable decorative panel that solves the aforementioned problems of the prior art.

Summary of the Invention

According to one aspect of the invention, a kitchen apparatus is provided comprising a sink with an attachable decorative panel. The sink has a front surface including a panel attachment portion adapted to receive the panel. The panel has a front face including a decorative treatment and a sink attachment portion whereby the panel may be affixed to the sink. There is at least one attachment member for joining the panel to the sink.

Brief Description of the Drawings

The Figure shows an exploded view of a kitchen apparatus according to the present invention.

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Detailed Description of a Preferred Embodiment

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Referring to the Figure, a kitchen apparatus 8 according to the present invention is shown. The kitchen apparatus includes a sink 10, preferably but not necessarily one that is known in the art as a farm sink. A farm sink is a counter-mounted sink that is not free standing, and that possesses a front surface that is visible after the sink is installed in the counter. However, a sink of the freestanding variety that has legs and is not integrated into a counter but where the front surface is nevertheless visible when the sink is configured for use may be used without departing from the principles of the present invention. The sink 10 is equipped with a basin 11 with a drain hole 9 for connection to a drain, and with one or more faucets 14 for introducing water into the basin. The faucets are typically not manufactured with the sink but are added during or after installation of the sink. Side flanges (not shown) may be provided whereby the sink is laterally supported by the adjacent countertop, to which the side flanges are attached and caulked. The basin 11 forms a depression in a generally horizontal surface 13, which is typically flat and which typically surrounds the basin circumferentially. Depending downwardly from a front portion 13a of surface 13 is a front surface 12 of the sink. The front surface 12 is typically substantially vertically oriented, but this is not necessary. In the preferred farm sink embodiment, a gap 15 is typically provided between the basin and the front surface 12 to allow the sink to be additionally supported by a structural element of the counter in which it is installed that runs laterally through the gap. The front surface 12, which is visible after sink installation, conceals this structural element. The sink is generally constructed of metal as a single unit by casting, but could also be formed through other techniques such as the bending, cutting and welding of sheets of metal.

If the front surface of the sink is plain in texture, as is the case with most farm sinks currently on the market, the natural color and texture of the smooth metal contribute their visual qualities to the overall visual impression of the kitchen counter and sink assembly. However the decorative attractiveness of a featureless metal surface is limited. Even if as mentioned above the metal surface is textured by peening or other working of

the surface, the improvement is relatively small. It is the intent of the present invention to provide a means whereby this visual quality can be enhanced to a greater degree and in a wide variety of ways. This is accomplished through the introduction of a panel 20 which may embody a large number of different types of decorative treatments that will enhance the appearance of the front of the sink as it is placed in a kitchen.

The panel 20 embodies a decorative feature and may be any article that the user desires to display on the sink 10. The panel is shown in the Figure as a substantially flat panel, however the panel may have any geometric configuration. The panel preferably has substantial thickness, so that it is sufficiently rigid to be self-supporting without being attached to the sink. Accordingly, panels are preferably formed of materials such as metals of various types, stone, wood, plastic, ceramic or other material of adequate strength, but not including such insubstantial objects as a flexible plastic sheet like a decal or a very thin sheet of metal such as foil. The panel may be formed of the same metal of which the sink is preferably formed, e.g., bronze, nickel, or stainless steel, or it may be formed of other materials such as a different type of metal, stone, ceramic, wood, glass, or other materials that may be carved, cast, molded, coated, etched, painted, enameled, engraved or otherwise modified, worked or shaped to provide a decorative treatment. A panel may even be featureless, the decorative enhancement resulting only from the different color of the metal used or contrasted with the metal of which the sink is constructed, or a different color or texture resulting from processes such as anodizing, sandblasting and so forth. But preferably the panel is decorated with images that add to the visual interest of the sink, such as landscapes, natural images, abstract designs, human figures and similarly decorative subjects.

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Preferably the images on the panel are in relief, i.e. three-dimensional, for example bas-relief images depicting decorative objects or scenes, but a two-dimensional image that is painted or applied in other ways to the front face of the panel may be used without departing from the principles of the present invention. It is entirely consistent with the principles of the invention if the decoration on the panel is obtained by a

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combination of processes, for instance molding figures in relief, then enameling them to provide added color.

At least one attachment member is used to affix the panel 20 to the front surface 12 of sink 10 so that the decorative treatment on the front face of the panel is visible when the sink is installed. The attachment member may be of various different types such as are well-known in the art, such as bolts, welds, glue, or hook and loop fasteners and which are suitable for the form of the panel. The Figure shows bolts 24 used as attachment members, the bolts passing through holes in the panel and being secured to the sink either by screwing into threaded holes in the front surface of the sink or by means of nuts screwed onto the bolts behind the front surface of the sink.

The front surface 12 of the sink comprises a panel attachment portion 16 which is adapted to receive the panel 20. In addition, the front surface 12 is preferably adapted to frame the panel, such as by providing a recessed portion 12a that is adapted to fit the panel, but this is not essential. The panel attachment portion of the front surface comprises any area or feature of the front surface where the panel may be attached, including holes which may be threaded to receive bolts 24, or a flat area where the panel may be affixed by gluing or through the use of a hook and loop fastener, or regions of the front surface 12 where spot or bead welds may be used to affix the panel to the front surface. It is thus apparent that the character of the panel attachment portion of the sink will depend upon what type of attachment member is used to affix the panel.

On the panel 20 a sink attachment portion 22 is provided whereby the panel may be affixed to the front of the sink 10 by an attachment member. The sink attachment portion may, similarly to the panel attachment portion, differ depending upon the nature of the attachment member used; for instance if bolts are to be used as attachment members, the sink attachment portion includes the holes in the panel where the bolts 24 pass through; if spot welds are used as attachment members, the sink attachment portion includes the edges or corners of the panel where the spot welds are to be located. It is also possible that the sink attachment portion may simply comprise the rear surface of the

panel itself, such as when the panel will be affixed to the sink by means of glue, such as industrial strength epoxy resin. If the panel is attached by a bead weld, the sink attachment portion is the entire edge of the panel.

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While it is consistent with the present invention that the selected panel be permanently affixed to the sink so that removal of the panel after installation would cause damage to the panel or to the sink, preferably the panel is attached by some reversible means such that the panel may be later removed and a different panel substituted if the sink owner wishes to vary the decorative artwork. The attachment member is preferably of a type that allows for easy removal of the panel after attachment without causing damage or at least significant damage to the panel or the sink. For instance, bolts 24 are preferred attachment members. Thus, bolts which may be undone, or spot-welds which may be readily cut or pried free, may be used to reversibly attach the panel to the front of the sink. If glue is used, it may be of a strength designed to allow the panel to be pried off the face of the sink without damage to panel or sink. A hook and loop fastener may be used. Thus it is readily apparent that if affixation of the panel to the sink is reversible, not only may the panel be affixed to the sink prior to installation of the sink in the counter but it may be affixed to the sink after the sink is already fully installed. This feature also allows for replacement of the panel bearing the decorative images or treatment in a sink that is already in place in the kitchen counter.

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Thus the present invention provides a sink that may be manufactured in a costeffective manner but yet allows a wide variety of decorative features to be incorporated while allowing for the seller of such sinks to offer a good degree of flexibility to potential buyers.

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The terms and expressions which have been employed in the foregoing specification are used therein as terms of description and not of limitation, and there is no intention, in the use of such terms and expressions, of excluding equivalents of the features shown and described or portions thereof, it being recognized that the scope of the invention is defined and limited only by the claims which follow. It will doubtless be

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obvious to those of ordinary skill in the art that there are other embodiments employing these principles that are not described in detail herein.